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L1 ANSWER 1 OF 1 WPIX COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1979-43214B [23] WPIX

TITLE: Storage stable epoxy resin hardener - consists of acid

anhydride contg. small amt. of maleic anhydride, tert,

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amine and water or alcohol.

DERWENT CLASS: A21 A60 E19

PATENT ASSIGNEE(S): (HITB) HITACHI CHEM CO LTD

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COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

JP--54053200 A 19790426 (197923)* JP--80030728 B 19800813 (198036)

PRIORITY APPLN. INFO: 1977JP-0119582 19771005

INT. PATENT CLASSIF.: C08G-059-58

BASIC ABSTRACT:

JP 54053200 A UPAB: 19930901

The hardener consists of (1) acid anhydride contg. 0-1 wt. % maleic anhydride, (2) tert. amine or cpd. contg. it, and (3) water or alcohol in amt. 0.1-5 wt. % based on the total of (1) and (2).

Decomposition of acid anhydride is inhibited by water or alcohol.

Pref. content of maleic acid is <0.1 wt. %.

In an example, a mixt. of methyl tetrahydro phthalic anhydride (contg. 0.01 wt. % maleic anhydride) 100 g and tris)dimethylamino methyl)phenol) 1 g evolved 126 ml of CO2 gas when stored at 50 degrees C for 24 hours. The same mixt. contg. methanol 1 g evolved 19 ml after storage under the same conditions.

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB

MANUAL CODES: CPI: A05-A01B; A08-D02; A08-D03; E06-A02; E10-B03B

PARTIAL TRANSLATION OF JAPANESE UNEXAMINED PATENT PUBLICATION (KOKAI) NO. 54-53200

Title of the Invention: Epoxy Resin Composition

Publication Date: April 26, 1979

Patent Application No.: 52-119582

Filing Date: October 5, 1977

Applicant: Hitachi Kasei Kogyo K.K.

Priority claimed: None

SCOPE OF CLAIM FOR PATENT

A curing agent for an epoxy resin comprising, anhydrides comprising 0 to 1% by weight of maleic anhydride, a tertiary amine or a compound comprising tertiary amine, and at least one of water and an alcohol, wherein the amount of water and/or an alcohol is 0.1 to 5% by weight on the basis of total of the anhydrides and the tertiary amine or a compound comprising tertiary amine.

DETAILED DESCRIPTION OF THE INVENTION (EXCERPT)

The present invention relates to a curing agent for an epoxy resin, and specifically, relates to a curing agent having storage stability comprising anhydrides and a tertiary amine or a compound comprising tertiary amine as a curing accelerator.

The tertiary amine is, for example, benzyldimethyl amine, N,N-dimethyl aniline, tris(dimethylaminomethyl)phenol, 2-ethyl4-methylimidazole, 1-benzyl2-methylimidazole, 1-methylimidazole, etc.